This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) An X-ray imaging method comprising the steps of:

forming a set of 2-dimensional X-ray images of an object of the coronary vascular system to be examined~~, for example the coronary vascular system of a patient,~~ by means of a scan rotation of a single imaging device, i.e., an X-ray source, around said object over a run length, said X-ray images being acquired at predetermined characteristic time moments in a cardiac cycle of the object; and

reconstructing a 3-dimensional volume of the imaged object, wherein the run length of the scan rotation over substantially 180° is approximately 10° per second such that approximately 100 X-ray images corresponding to a quasi-stationary heart are obtained during the scan rotation~~, and wherein the number of measuring points obtained in successive cardiac cycles for reconstructing the 3-dimensional volume is reduced~~.

2. (Previously Amended) An X-ray imaging method according to claim 1, wherein, before the reconstructing step, images obtained at predetermined corresponding characteristic time moments in successive cardiac cycles are correlated with each other.

3. (Previously Amended) An X-ray imaging method according to claim 2, wherein the characteristic time moments substantially correspond to R-peaks of the cardiac cycle.

4. (Previously Amended) An X-ray imaging method according to claim 1, wherein, before the reconstructing step, images obtained at predetermined neighboring time moments in a predetermined characteristic time interval of a cardiac cycle are correlated with each other.

5. Cancelled

6. (Currently Amended) 3D-rotational X-ray apparatus ~~for applying the method according to claim 1~~, comprising a circular C-arm with a drive, the C-arm accommodating a single imaging device, i.e., an X-ray source, and an X-ray image pick-up device and being rotatable over an angle of substantially 180° around its center by means of said drive, triggering means for triggering the X-ray images at predetermined characteristic time moments in a cardiac cycle of the object, ~~wherein the number of measuring points obtained in successive cardiac cycles is reduced,~~ and means for processing the images obtained to reconstruct a 3-dimensional volume of the object, wherein the drive of the C-arm is adjusted to a run length of a scan rotation over substantially 180° at approximately 10° per second such that approximately 100 X-ray images corresponding to a quasi-stationary heart are obtained during the scan rotation.